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ABSTRACT

Public schools in Manitoba (Canada) are encountering an increasing number of students who are considered to be educationally at risk. This paper addresses the provision of effective services relating to at-risk youth and the prevention of early school dropouts. The paper's first section covers the circumstances and conditions associated with early school dropouts including those conditions found in the academic, school/social, home/school, and personal/social atmospheres. The second section examines a number of personal, social, and academic factors that lead to educational disadvantages as well as school-related practices that researchers have identified as having a high correlation with students who fail to complete their schooling with an adequate level of skills. The third section examines the issue of early school dropouts and reviews the key criteria related to assessing the extent of the problem, the characteristics of early school dropouts, and the factors contributing to their decision to leave school. The paper's fourth section outlines a range of possibilities for meeting the needs and addressing the problems of at risk youth. (Contains 79 references.) (GLR)

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An Education of Value For At Risk Students

Possibilities For Practice

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A Program Support Document
Student Support Branch
Manitoba Education and Training
1993

Manitoba Education and Training

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An Education of Value
For At Risk Students

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Introduction

Public schools in Manitoba are encountering an increasing number of students perceived by educators to be at risk of being unable to complete their schooling with an adequate level of skills. Although the term "at risk students" is found throughout an extensive body of educational literature and used in everyday discussion, it has liabilities. The term is imprecise and varies considerably in practice.

As a label, it has the potential to stigmatize students and inadvertently make some of their problems worse. The term also nourishes the perception of individual culpability and tends to isolate the problem with students or their families. Consequently, an uncritical use of the term is misleading. Educators need to consider how to organize and manage schools and teach students without overlooking a number of social problems within the community.

Educational research indicates that a number of personal, social, and academic factors places students at risk. Among the most significant factors are low socioeconomic status, family type, poor attendance, low English proficiency, and low achievement. Although Canadian research indicates that ethnic background and race are not major factors associated with poor educational performance, they may interact with low socioeconomic status in a way that needs to be determined within local and regional contexts. It is also evident that aboriginal students throughout Canada have not been well-served by the public school system (Churchill and Churchill, 1991; York, 1990; MacDonald, 1989).

In general, poverty stands out as the most conspicuous factor bearing the strongest relationship to poor educational performance (Gage, 1990; U.S. National Report, 1990; Keating and Oakes, 1988). Low income families, however, are not accountable for all students who leave school before graduating. Notably "school effectiveness" research indicates that schools with the appropriate characteristics help students from low socioeconomic backgrounds make significant gains in relation to basic academic achievement (Fullan, 1991; Squires, Huitt and Segars, 1983; Edmonds, 1979). While schools remain part of the solution, they are also part of the problem.

Evidence from educational research indicates that schools are in many ways operating in a manner that undermines the learning

potential and educational performance of students, especially at risk students. Among the major concerns are: irrelevant and unstimulating curricula, narrow and inappropriate instructional activities and assessment procedures, insensitivity to cultural and social differences among students, and questionable grouping and streaming practices (Allison and Paquette, 1991; Kronick and Hargis, 1990; Wehlage, Rutter, Smith, Lesko and Fernandez, 1989; White, 1989; Radwanski, 1987). All too often at risk students are seen in terms of what they lack rather than the strengths and talents they possess. Educational theory and practice needs to move beyond mere deficit reasoning to foster supportive learning cultures in school.

Many of the circumstances and conditions that undermine the learning potential and educational performance of Manitoba students may eventually jeopardize their graduation from high school. In this sense, the problems of early school leavers and of high school dropouts, are largely a matter of hindsight. It is the failure to address the circumstances and conditions that place students at risk in the first place.

The tragic personal, social, and economic consequences of leaving school before graduating or of graduating with an inadequate level of skills have been well-documented. For most individuals, it means fewer opportunities for personal development and less meaningful participation in social, political, and economic affairs.

Factors other than education, such as the state of the economy, gender, and race, influence successful employability. Research suggests that early school leavers have more trouble finding well-paid, life-long employment and a harder time obtaining further education and training. Early school leavers tend to have higher unemployment rates. Higher unemployment is associated with low self-esteem, higher mortality rates, higher number of suicides, and increased numbers of admission to psychiatric facilities (Gage, 1990).

Early school leavers are less likely than high school graduates to provide favourable educational opportunities for their children (MacDonald, 1989). They also increase the need for and cost of a variety of social services (MacDonald, 1989; Levin, 1988). Estimates

prepared for the Senate Committee on Social Affairs, Science, and Technology indicate that the economic cost of allowing 11,000 poor youth to leave school before graduating over the next 20 years could be $23 billion in lost income and productivity, $9.9 billion in foregone tax revenues and $1.4 billion in additional unemployment and welfare payments (Canadian Council on Social Development, 1991).

Manitoba Education and Training is committed to ensuring school success for at risk students, whether they are potential early school leavers or those students who persist with schooling despite poor educational performance. A number of effective initiatives and individual projects, such as academic programs for adolescent parents, have been undertaken. Despite recent initiatives and improvements in programming, however, the Department recognizes that the plight of at risk students deserves continued attention.

Addressing the needs of at risk students represents a challenging task replete with enduring difficulties. It is common for at risk students to have multiple needs that require comprehensive services. Furthermore, many students who are at risk of failing to complete their education with an adequate level of skills are also at risk as a result of other social problems, including physical and sexual abuse, substance abuse, AIDS, involvement in crime, and early and unwanted pregnancy. Although a number of factors that contribute to students being at risk are seen as existing outside the mandate of education, they cannot be ignored as they affect students' opportunities to learn and achieve success at school.

Manitoba Education and Training recognizes that ongoing communication and coordination among key partners in the educational process are critical to ensure a focused approach and an effective delivery of services to students. Promoting and developing a school-community resource network to meet the needs of at risk students will contribute to both their overall well-being and the social and economic health of the province.

Effective Program Delivery

The purpose of this paper is to contribute to the ongoing communication and coordination of an effective delivery of services,

especially as it relates to at risk youth and potential early school leavers. The senior years present a considerable challenge for at risk programming as earlier indicators of poor educational performance and potential early school leaving behaviour have been realized. In order to understand and address the difficulties experienced by at risk youth, there is a need to know who they are and the circumstances and conditions that place them at risk in the first place. Educators need to know both the circumstances and conditions over which schools can have some control as well as those conditions and circumstances that require a broader social infrastructure to support the schooling process.

In the second section of this paper, a number of personal, social, and academic factors as well as school-related practices that researchers have identified as having a high correlation with students who fail to complete their schooling with an adequate level of skills is examined. It is important to keep in mind that not all students who exhibit these characteristics will fail at school. Some students are vulnerable while others are more resilient to the circumstances and conditions that place them at risk.

The third section is an examination of the issue of early school leavers that reviews the key criteria related to assessing the extent of the problem, the characteristics of early school leavers, and the factors contributing to their decision to leave school. Research indicates that for many students the process of early leaving appears to be an extended one; the conditions that lead finally to withdrawal develop over time. Interest in school and relevance of the educational experience appear to be central issues for many school leavers. Certainly, the failure of schools to link what is taught in the classroom to the personal needs, concerns, and interests of students in socially and educationally beneficial ways fosters various forms of resistance to and rejection of the schooling process, including eventual withdrawal.

Considerable progress has been made in identifying and documenting the necessary strategies and classroom conditions to deliver the best education to at risk students. The fourth section of the research document outlines a range of possibilities for meeting the needs and addressing the problems of at risk youth.

Many at risk children enter school with little educational exposure and few of the readiness skills needed to succeed in the standard school curriculum. The longer they remain in school, the further behind they fall. Evidence suggests that the most important factor underlying successful approaches to at risk students is early intervention to prevent students from falling behind. Nevertheless, not all at risk youth enter high school with problems due to their elementary school experience. Making the transition to high school, for example, is a difficult experience for many students. Even at the high school level educators are able to intervene early with a variety of appropriate strategies.

Parents play a critical role in the educational process by encouraging and enhancing the educational accomplishments of their children. The benefits of parental involvement are not restricted to early childhood or the elementary level (Spain and Sharpe, 1990; MacDonald, 1989; Willis, 1989). There are also strong effects noted as a result of involving parents in the educational process continually throughout the senior school years.

Research suggests that for many at risk students the cause of their academic difficulties is not linked to personal and social factors or low ability, but rather to school and classroom practices.

Research suggests that for many at risk students the cause of their academic difficulties is not linked to personal and social factors or low ability, but rather to school and classroom practices (Kronick and Hargis, 1990; Keating and Oakes, 1989; Wehlage, Rutter, Smith, Lesko and Fernandez, 1989; Radwanski, 1987). Issues of foremost importance are: the structure of Manitoba schools, the knowledge and its presentation, and the quality of staff and student relationships (Eisner, 1991B). Other contributions to improved outcomes for at risk students include

- early intervention
- substantial parental involvement
- innovative and stimulating curricula
- a repertoire of effective instructional strategies that captivates students
- an appropriate assessment procedure
- a positive and supportive learning environment
- enhanced opportunities for staff development

Communities also influence the cognitive, emotional, and social development of children and youth. The fate of at risk students

depends not only on enhanced parent involvement and schooling practices, but also on effective community participation (Nettler, 1990). Promoting and developing school-community resource networks help to create a broader social infrastructure to support the education of at risk students.

The underlying message from current research is that no one single approach can effectively meet their complex range of needs. The task is to integrate strategies into a coherent whole rather than simply stacking them on top of one another. Many other countries consider that only an integrated preventative education system can address the problems of at risk children and youth (Organization for Economic Cooperation and Development, 1990).

Research, originating from the United States, dominates much of the understanding of at risk students and the range of potential strategies. Although Canada and the U.S. share a number of common experiences, the social, cultural, and economic contexts between the two countries vary significantly. Such variations also exist within Canada.

Addressing the diverse needs of at risk students is complex. Simply transplanting successful educational models or strategies from other jurisdictions may not work. Meaningful insights and research results may be extrapolated from other sites. In the final analysis, however, strategies must be locally crafted in a manner that is compatible with the unique needs of the students and the community served by the school. This is best accomplished by the school staff sharing responsibility for decision-making.

A number of theoretical positions and multiple lines of evidence suggest that constant top down policy-making and reform frustrates the enhancement of educational practice (Hopkins, 1992; Glasser, 1990; White, 1989; Marburger, 1988; Wideen and Andrews, 1987). Such practices actually diminish staff morale, and correspondingly the level of effort and commitment. Individual participants at school sites, who are provided with the appropriate knowledge and skills, must take advantage of the range of possibilities that nurtures the learning potential and educational performance of at risk students (Fullan, 1991).

Circumstances and Conditions

Several personal, social, and academic characteristics have been shown through research as having a correlation with students who fail to complete their education with an adequate level of skills (Gage, 1990; MacDonald, 1989; Slavin and Madden, 1989; Ogden and Germinario, 1988; Phlegar and Rose 1988, Merchant, 1987). This includes potential early leavers as well as those students who persist with schooling despite poor educational performance. These characteristics include

Academic

- low basic skills test performance, results significantly below peers
- poor grades in basic skill areas, or across all subject areas
- low academic self-concept

School/Social

- one or more years older than other students in the same grade. (This indicator has been shown to be the most significant predictor of leaving school before graduation)
- attendance problems; failure to attend school on a consistent basis, i.e., absent once a week or three or more times a month
- discipline problem, especially a pattern indicating that disciplinary action is not serving as a deterrent
- no extracurricular involvement
- frequent transfers between school
- lack of motivation or interest in school

Home/School

- low family socioeconomic status
- unstable home/family violence
- low educational level of parent/sibling
- single parent families
- poor attitude of parent toward school/graduation
- limited or no English proficiency (in Anglophone communities)
- minority ethnic origin

Personal/Social

- employed in a job that interferes with schooling (generally, employment over 10 hours a week is considered potential for interference, over 15 hours is a serious threat)

- poor health or easily fatigued
- negative self-concept/low self-esteem
- alcohol/substance abuse
- victim of sexual abuse
- pregnant and/or parenting
- low sociability/social maturity
- low sense of personal autonomy (power to influence the environment and to effect desired outcomes)
- external locus of control (controlled by external forces such as peer pressure)

Research indicates that four factors emerge repeatedly as bearing the strongest relationship to poor educational performance (U.S. National Report, 1990). Poverty stands out as the most conspicuous overall factor. Other factors include: living in a single parent household, poor English proficiency, and race or ethnic minority status.

Canadian research also suggests that poverty has a strong relationship to poor educational performance. Although race and ethnic background are less prevalent factors (Naylor, 1990; MacDonald, 1989), they may interact with poverty in a way that needs to be determined within regional and local contexts (Morris, Pawlovich and McCall, 1991).

The characteristics of the lowest income earners are strongly associated with poor educational performance and the tendency to leave school before graduating. Poverty is involved directly and indirectly with the following (Canadian Council on Social Development 1991; Morris, Pawlovich and McCall, 1991; Gage, 1990)

- amount of reading materials in the home
- family attitudes toward education
- parental aspirations for their children
- career aspirations of students
- physical and mental health problems
- poor nutrition for the child and mother before and during pregnancy, and low birth weight, contribute to higher incidences

of neuro-developmental disabilities, birth defects, and respiratory tract problems in children

- alienation from mainstream culture, resulting in lower self-esteem and a tendency to withdraw from identification with school and other extracurricular activities.

A number of studies have documented the mediating effect of family support, of parental involvement, in the education process (Morris, Pawlovich and McCall, 1991; Willis, 1989; Ziegler, Hardwick and McCreath, 1989; Clark, 1983). Since family home supports differ, depending on the nature or duration of the family's poverty, not all poor children experience the same problems in school or require the same degree and type of support.

Consequently, educational strategies need to consider the wide variations in the needs of students from poor families. Furthermore, research, notably "school effectiveness" research indicates that schools with the appropriate characteristics can help students from low socioeconomic backgrounds make significant gains in relation to basic academic performance (Fullan, 1991; Squires, Huitt and Segars, 1983; Edmonds, 1979). Strong leadership, high expectations for students, clear goals, frequent monitoring, and parental involvement are appropriate or key characteristics.

The various circumstances and conditions that place students at risk are far from accurate predictors of poor educational performance. All children from single parent households do not lag behind academically. Multiple lines of evidence show that at risk factors may produce no lasting damage when alone, but may produce significant harm when combined (Schorr, 1989). Certainly, students who exhibit two or more characteristics have a greater likelihood of poor academic performance or withdrawal from school. At the same time, however, many students may experience or exhibit one or more of the above characteristics without experiencing school failure. Some students, then, are vulnerable while others are more resilient to the circumstances and conditions that place them at risk. Although the above characteristics are less than perfect in predicting **individual** educational performance, they are consistently related to lower levels of **group** achievement and attainment.

Institutional Practices

Evidence from educational research indicates that schools operate in many ways counterproductive to learning, especially for at risk students, result in a significant number of youth leaving school before graduation (Allison and Paquette, 1991; Kronick and Hargis, 1990; Wehlage, Rutter, Smith, Lesko and Fernandez, 1989; Keating and Oakes, 1988; Radwanski, 1987). These students are often referred to as pushouts. Among the institutional practices and procedures that have been cited for compounding the academic problems of at risk students are

- lack of curriculum relevance
- course offerings inappropriate for students of low academic achievement
- instructional materials and ineffective teaching styles unsuited for students
- excessive or inappropriate testing and faulty interpretation of test results, especially for minority students
- teacher insensitivity to cultural and social differences among students
- demands for higher expectations/graduation standards without accompanying provisions for support services
- lack of adequate counselling for students
- failure to provide at risk students with meaningful experiences in school
- narrow vocational training

Such institutional practices have led a number of educators and researchers to suggest that if meaningful attempts to address the problems of at risk students are to be made, the concern should be the characteristics of the school rather than the characteristics of the student (Wehlage, Rutter, Smith, Lesko and Fernandez, 1989; Keating and Oakes, 1988; Radwanski, 1987).

The most significant issue facing educators is developing a concept of schooling that is attractive enough to captivate at risk students, but also is effective in nurturing their learning potential and development.

Wehlage, Rutter and Turnbaugh (1984) contend that the most significant issue facing educators is developing a concept of schooling that is attractive enough to captivate at risk students, but also is effective in nurturing their learning potential and development. They suggest that attractive and effective schooling offers something positive both to students and society. The first step is for schools to change fundamental school-student interactions. This requires a

major effort to "re-engage" those who have become alienated. Reversing alienation begins with the creation of a positive social bond between teachers and students and positive school experiences. Secondly, educational experiences should avoid repetitive remediation in low level basic skills and narrow vocational training. Thirdly, educators need to find ways to promote personal and social development as well as academic skills and knowledge. One particular model of schooling that is proposed is the alternative school, which is examined in more detail in the fourth section of this paper.

It is evident, then, that a variety of circumstances and conditions can place students at risk of failing to complete their education with an adequate level of skills. It is common for at risk students to have multiple needs which require comprehensive services. Furthermore, as a significant number of at risk students are handicapped by social problems, failure to address the circumstances and conditions that place students at risk can undermine their learning potential and educational performance and eventually jeopardize their high school graduation.

Early School Leavers

The Extent of the Problem

The full scale of early school leaving, provincially or nationally, is largely unknown. Canadian studies have only estimated the actual numbers of early school leavers (MacDonald, 1989). The Youth Affairs Branch of Employment and Immigration Canada estimated that approximately 30 per cent of Canadian high school students left school prematurely in 1990. However, such a rate conceals evidence of inter- and intra-regional variability (Morris, Pawlovich and McCall, 1991), as early school leaving rates vary across provinces, divisions, and schools.

The confusion about the actual numbers of early school leavers is influenced by three factors (Morris, Pawlovich and McCall, 1991)

- definitions of early leaving
- computational formulas
- student tracking systems

A survey of educational research indicates that there does not appear to be a widely used uniform definition of early school leavers (Morris, Pawlovich and McCall, 1991; Gage, 1990; Kronick and Hargis, 1990; Spain and Sharpe, 1990, MacDonald, 1989). From a Canadian perspective, no one has actually defined an early school leaver with respect to all categories of students, for example, students who are in special programs (Spain and Sharpe, 1990).

In a review of educational policy in Ontario, early school leavers are defined as "any student who leaves school before having obtained his or her Grade 12 diploma" (Radwanski, 1987).

The U.S. Census Bureau defines an early school leaver as "a person of high school age who is not enrolled in school and is not a high school graduate" (Gage, 1990).

In the first national study on early school leaving in Japan, which began in 1989, early school leavers were defined as "students who were absent from school for more than 49 consecutive days during the school year without a legitimate reason."

The state of Wisconsin, which has enacted children at risk legislation to keep students in school through graduation, uses a

more elaborate definition to define an early school leaver as a pupil who

- ceases to attend school
- continues to reside in the school district
- does not attend a public, private vocational, technical, and adult education district school or home-based private educational program
- has not graduated from high school with an acceptable excuse

Manitoba Education and Training Definition of Early School Leavers

Any student under 21 years of age who was enrolled in the school division/district at some time during the previous school year, and

- *was not enrolled by September 30 of the current school year*
- *has not transferred to another public, private, or province-approved education program*
- *has not graduated from high school with an acceptable reason**

** Acceptable reasons include medical illness and death.*

Definitional difficulties are further compounded by the complexity of calculating early leaving rates and tracking students through the school system. The time frame, the range of grades and the student accounting procedure, that is, the process of tallying students in a school or division, are three computational factors that have been identified as influencing the calculation of early school leaving rates (Morris, Pawlovich and McCall, 1991). Three time frames, for example, have been used to compute early leaving rates. They include an annual rate, a cumulative rate that focuses on the educational attainment of a specified class or cohort of students, and the status rate, that is, the percentage of persons in a specified population who are currently not in school or who left school early and have not subsequently completed high school.

Summer leavers are a particular source of confusion in the determination of early school leaving rates (MacDonald, 1989). Verifying that a person has decided to leave school permanently becomes a difficult task, especially when there is no consultation with the school and it becomes official only after an extended period of non-attendance (Spain and Sharpe, 1990). Early leaving rates are also affected by both accidental and purposeful reporting errors at the school and divisional level (Gaga, 1990). Some school divisions that are defensive about high rates of early school leaving hold figures down, while divisions that seek more funding inflate the figures (Gage, 1990; Hargis and Kronick, 1990).

A lack of a uniform definition for early school leavers, and a standard formulation rate, difficulties with tracking students and accidental and deliberate reporting errors all conspire to undermine the

validity and reliability of available data on the nature and scope of the early school leaving phenomenon. Consequently, efforts to adequately address policy, and planning matters, prevention strategies and budgeting issues are greatly hindered, as are attempts to gauge how successfully educators are dealing with the problem.

Characteristics of Early School Leaving

In the previous section, a number of circumstances and conditions that place students at risk and can eventually jeopardize their high school graduation were reviewed. Essentially, the research indicates that early school leavers do not fit neat, tight stereotypes. They are a heterogeneous group whose characteristics vary.

Low socioeconomic status, low levels of parental involvement in the education process, low education aspiration by leavers and their families are among the most significant family and background characteristics that relate to the process of early school leaving (Gage, 1990; MacDonald, 1989). Students from low socioeconomic backgrounds tend to have the highest rates of early leaving (Keating and Oakes, 1988; Wehlage, Rutter and Turnbaugh, 1987).

Although ethnic background and minority group membership is not considered a significant characteristic of early school leavers in Canada (Naylor, 1990; MacDonald, 1989), it may be a factor within a number of regional and local contexts (Ayim, 1991; Morris, Pawlovich and McCall, 1991). It is evident that early school leaving rates for the aboriginal population deserve special attention (Churchill and Churchill, 1991; York, 1990; MacDonald, 1989).

Among the leavers' personality characteristics that have been cited by the research are an external locus of control and delinquent behaviours. Certain delinquent attitudes and behaviours that are characteristic of alcohol and drug users are shared by early school leavers. In view of these behaviours, promotion of drug and alcohol awareness and education programs in the school and community should be part of the integrated approach to dealing with the early school leaving problem (MacDonald, 1988).

Low self-concept is implicated in almost all discussions of early school leaving on both theoretical and practical levels (Spain and

Sharpe, 1990). Essentially, self-concept refers to the structure of beliefs that people have about themselves, their physical and mental abilities, personality, social standing and interpersonal skills. It is considered to influence or guide behaviour.

It has been consistently found that more males than females leave school early (MacDonald, 1989). There are differential experiences in the schooling process for males and females (Ayim, 1991), as well as considerable differences in their reasons for withdrawing from school prematurely (Spain and Sharpe, 1990). In a recent Statistics Canada survey, twice as many male early school leavers noted that they "preferred work to school" while females were likely to note "problems with school work." Consequently, schools must address a variety of motivational factors and organizational and program dimensions to meet the range of needs of potential male and female early leavers. Teenage mothers, for example, cited the importance of access to affordable day care as a critical feature of any school or training program (Employment and Immigration Canada and Statistics Canada, 1990).

School-related characteristics of leavers (Morris, Pawlovich and McCall, 1991; Spain and Sharpe, 1990) include

- being overage due to grade retention
- low academic self-concept
- dissatisfaction with school
- poor academic performance and achievement

Early school leavers also tend to be socially isolated. They participate in neither school athletic teams nor in social clubs (Employment and Immigration Canada and Statistics Canada, 1990; Kronick and Hargis, 1990; Swedish National Report, 1990).

Research indicates that many youths who leave school early have the intellectual ability to successfully complete high school. A significant portion of Canadian youth who leave school before graduation have at least average intellectual ability (MacDonald, 1989; Radwanski, 1987). Over 30 percent of early school leavers, who participated in a recent Statistics Canada survey (December 1991) reported averages of A or B, while just over 10 percent

reported D's and F's. With appropriate interventions a greater proportion of those students are able to successfully complete high school.

The Decision to Leave

For most students, the process of early leaving appears to be an extended one, with the conditions which led finally to withdrawal developing over time (Employment and Immigration Canada and Statistics Canada, 1990; Spain and Sharpe, 1990, MacDonald, 1989; Merchant, 1987).

In a study of early school leavers, sponsored by Employment and Immigration Canada and Statistics Canada in 1990, most students described a long, gradual process of withdrawal from school. The process usually began with a lack of involvement in school activities and a lack of friends at school. In some instances, this represented a gradual withdrawal from participation in school activities. In other instances, it represented a failure to become integrated and involved in school activities. Often this withdrawal occurred during the transition to high school, which was described by most school leavers as a very difficult experience. In contrast, students who persisted with their schooling and graduates generally reported participating in a long list of structured and non-structured school activities.

Throughout the process, absenteeism and poor academic performance appear locked in a vicious circle. As students miss class, they fall behind even more, so they begin to skip even more classes. This is thought to lead to a sense of failure and a lowering of self-esteem, eventually leading them to decide to leave school. In many cases, however, it was not clear which occurred first, poor academic performance or absenteeism.

Other common steps in the leaving process include being suspended from school for physical violence and frequently changing programs in schools. Features of the withdrawal process may serve as warning signs to identify students who are likely to leave school prematurely. Nevertheless, not all students follow this process. Spain and Sharpe (1990) suggest that for some students, a decision to leave is likely

never made. One day, the person simply fails to return to school for a final time.

Most students appear to make the break from school during the summer months (MacDonald, 1989). In a study of Newfoundland youth, the largest number of decisions to leave school took place in the summer. Forty-seven per cent of the youth in their study decided to make the break in June, compared to 6.7 per cent in September and 8.1 per cent in October (Spain and Sharpe, 1990).

Reasons for Early Leaving

Students leave school before graduating for a complex and often interwoven set of personal, social, economic, and school-related reasons. Students, teachers, and administrators report a variety of reasons for early leaving. These reasons, however, must be given a cautious interpretation. In the case of students, the charge is that self-reported reasons for leaving school may be influenced by "after-the-fact rationalizations" (Radwanski, 1987). Teachers and administrators are focused upon immediate antecedent factors, such as school behaviour and academic performance, instead of the underlying causes that might at least partially account for the surface symptoms (Morris, Pawlovich and McCall, 1991).

The main reason given by students for leaving school prematurely appears related to dissatisfaction with the schooling process (Morris, Pawlovich and McCall, 1991; Employment and Immigration Canada, 1990; Spain and Sharpe, 1990; MacDonald, 1989; Wehlage and Rutter, 1986). Interest in school and the relevance of the educational experience appear to be key issues for many leavers. This, among other factors, has led a number of educators and researchers to conclude that structure of schools, content of curricula, and instructional organization bear major responsibility for students leaving school early and fostering in them a sense of alienation. Not to be overlooked is the fact that leaving school early may also have a psychological explanation related to an individual's abilities and motives (McPeck, 1991; Sanders, 1991).

In a study, involving 40 pairs of leavers and persisters, matched for intellectual ability and gender, MacDonald (1989) found that leavers had significantly lower grade point averages and academic self-

concepts and were significantly more alienated from school than were persisters. Evidently, personal, and social factors played an important part in the school leaving process for those leavers.

A study of Newfoundland youth found that early leavers recognized value in education and that many expressed aspirations that implied a need to make an important commitment to extensive education and training (Spain and Sharpe, 1990). Nevertheless, they had rejected public education, the initial step in achieving their aspirations. According to the study, the issue may be in the leavers' perception of the educational experience and the way it relates to their lives, including its relevancy.

All the school leavers who participated in a national study sponsored by Employment and Immigration Canada and Statistics Canada expressed a profound sense of alienation from the school setting. Although the reasons varied among participants, early school leavers described a sense of isolation from schools and a feeling of not fitting in. These feelings were attributed to differences in learning approaches, goals, beliefs, willingness or ability to follow the rules, and physical appearance. They also felt isolated from their peers.

Most aboriginal school leavers who participated in the study felt that racism influenced their decision to withdraw (Employment and Immigration Canada, 1990). Many of them described being called names by other students and feeling detached from the students at school. They felt a conflict between aboriginal culture and that of school. Those who had to leave home to attend high school found this a difficult and lonely experience. Unidentified "experts" interviewed during the study saw the problems of aboriginal students in rural areas who must leave home to attend high school as an important cause of leaving.

Churchill and Kaprielian-Churchill (1991) contend that to a large extent aboriginal youth have rejected the public school system, whose curriculum is predicated on the assumption that aboriginal culture is inferior. They suggest that developing a new model of schooling based upon aboriginal initiative appears to be the only approach that will place aboriginals in a position to adopt parts of mainstream culture on their own terms and in their own ways.

Lack of motivation was another major reason given by leavers and school officials for withdrawal. Poor motivation may be seen as a primary cause or secondary effect of poor school performance (McPeck, 1991; Sanders, 1991). As a concept, motivation is often viewed in the context of interest and engagement in the educational enterprise itself and perceived as an instructional problem in developing interest in the task at hand. However, the problem is more complex than this, and it may be necessary for educators to examine the perception of relevance itself as a basis for the motivation of learning (Spain and Sharpe, 1990).

If schooling is perceived by students to be irrelevant, it will be difficult for teachers to create interest, assuming that it is possible to make in the first instance the various aspects of learning interesting. Some tasks in school may be necessary, but uninteresting. Similarly, many skills in the workplace are learned through rote, as well as repetitive and monotonous tasks. Consequently, while teachers may strive to make tasks interesting and engaging, in the final analysis, skills may be best acquired by the student who is most persistent (Spain and Sharpe, 1990).

Other reasons given by students for leaving school include (Morris, Pawlovich and McCall, 1991; Employment and Immigration Canada and Statistics Canada, 1990; MacDonald, 1989; Wehlage and Rutter, 1986)

- dislike of teachers
- discipline problems
- low grades
- alcohol or drug abuse
- lack of financial support

Evidence from recent studies on early school leavers suggests that genuine financial need appears to have receded in importance as a major factor in school withdrawal (Morris, Pawlovich and McCall, 1991; Spain and Sharpe, 1990). However, exceptions to this finding can be found in school jurisdictions with a high proportion of recent immigrants and refugees (Morris, Pawlovich and McCall, 1991).

Early school leavers also cite lack of support for remaining in school and a sense that the school has actually pushed them out. Lack of support took the forms of disinterested teachers (Wehlage and Rutter, 1986), uncaring individuals who some students viewed as impersonal, paid caretakers, and "apathetic parents" (Employment and Immigration Canada and Statistics Canada, 1990). In contrast to school leavers, common threads that bound persisters and graduates included (Employment and Immigration Canada and Statistics Canada, 1990; MacDonald, 1989)

- having close friends at school
- parents interested in and monitoring their school progress
- personal role models

Each of these factors has programming implications for at risk students.

The range of early school leaving factors, the diversity of reasons offered by students as to why they withdrew from school prematurely, and the multi-dimensionality of the leaving process contribute to suggest that no single strategy can serve an entire at risk population of students. In some cases it may be necessary to implement different combinations of strategies in order to address the needs of different types of students.

Possibilities for Practice

Considerable progress has been made in identifying and documenting the necessary strategies and school conditions to deliver the best education to at risk students. A critical body of research accumulated over the last two decades identifies the following strategies to improve outcomes for at risk students including

- early intervention
- substantial parental involvement in the educational process
- innovative curricula
- effective instructional practices that engage students
- a positive and supportive learning environments
- enhanced opportunities for staff development
- community involvement

Early Intervention

The elementary school establishes the foundation of skills, attitudes, and behaviours that facilitate the acquisition of knowledge and skills necessary for the successful completion of high school. Research shows that most at risk students enter school without many of the skills needed to succeed in the standard school curriculum, and the longer they remain in school the further behind they fall (Cuban, 1989; Slavin and Madden, 1989). The low self-esteem and low academic self-concept that characterizes many at risk students and early leavers appears to develop during the early school years. It predisposes them, as well as some of their teachers, to expect lower levels of academic achievement (Helge, 1989; MacDonald, 1989).

Current U.S. research reports a significant increase in childhood psychological disorders, involving developmental delays, learning difficulties, and emotional and behavioural problems that may interfere with a child's academic success and peer relationships (Zill and Schoenborn, 1990). Increases in these disorders have been attributed to growing proportions of children who have

- experienced parental divorce
- been born outside of marriage
- raised in conflict-filled families
- low-income, low-education, single-parent household

Childhood learning and behavioural problems may also be multiplying because of the increased survival rate of extremely low birth-weight babies, the possible effects of environmental contamination, and the rising numbers of babies born to crack-addicted mothers.

Multiple lines of evidence suggest that the most important factor underlying successful approaches to at risk students is early intervention which tries to prevent students from falling behind in the first place (Kagan, 1989; Cuban, 1989).

Consequently, schools need to target students early for appropriate intervention-prevention strategies which include (Hobbs, 1984; Kagan, 1989; and McCall, 1991)

- pre-school early intervention programs
- elementary school counselling programs
- effective parenting programs, home-school liaison programs
- parental involvement programs

Another strategy involves developing a plan for "accelerated learning," which enables low-achieving students to catch up with their peers early in school. The goal of the accelerated school is to bring all children up to grade level by the end of the sixth grade (Levin, 1988). Nevertheless, while early intervention programming may be seen as a means of getting students off to a good start, successful attempts to assist at risk students also require additional long-term strategies and sustained resources.

It is notoriously easy to attribute the problems and difficulties that students experience in the senior years to earlier experiences at the elementary school level (McNay, 1991). However, not all at risk youth experience difficulties that date back to the early or middle years. The transition to high school, for example, represents a difficult experience for many students (Employment and Immigration and Statistics Canada, 1990; MacDonald, 1989). Even at the high school level, students can be monitored for identifiable signs of behaviour associated with early school leaving, and educators can

intervene early with a variety of appropriate strategies. Some of the identifiable signs of behaviour include

- truancy and excessive absences
- little participation in school/extracurricular activities
- low or failing grades in at least two courses
- difficulty communicating with teachers and other students
- little interest in classroom work

Parental Involvement

Parents are of primary importance in the optimal cognitive, social, and emotional development of their children. Research clearly demonstrates that educational programs designed with strong parental involvement can enhance the academic accomplishments and social development of students (Liontos, 1991; Ziegler, Harwick and McCreath, 1989; Greenberg, 1989; Lyons, Robbins and Smith, 1983). Children from low-income families appear to have the most to gain when schools involve parents (Kagan, 1989; Hobbs, 1984). Furthermore, parents do not have to be well-educated to assist their children.

In a study of poor Afro-American children (Clark, 1983), certain patterns appear consistently in the homes of achievers, regardless of whether the family had one or two parents. These families were characterized by frequent conversations between parents and children, strong parent encouragement of academic pursuits, clear and consistent limits for children, warm and nurturing relationships, and consistent monitoring of how time is used.

The benefits of parent involvement are not confined to early childhood or the early and middle years of school. There are strong effects for involving parents continually throughout the senior years (Willis, 1989). A number of studies confirm the value of parental involvement at the high school level and suggest that early school leaving may be prevented by supportive parents (Spain and Sharpe, 1990; MacDonald, 1989). Some early school leavers indicated that lack of parental support, more specifically "apathetic parents," contributed to their decision to withdraw from school (Employment and Immigration Canada and Statistics Canada, 1990).

Some evidence suggests that many parents feel unequipped to advise their children even though they generally hold high expectations for them (Spain and Sharpe, 1990). These parents feel that their children must make the decisions about schooling. In the case of students who successfully graduate, this has been shown to be one of the factors differentiating them from those who do not pursue a post-secondary education. This could be a factor in the early leaving process as well. Consequently, programming that is directed at the empowerment of parents to assist in the decision-making process might help to change some of the decisions now being made to leave school.

Parental involvement may occur at various levels of school life, from general support of the school's educational programs and involvement in learning activities at home through active participation in school activities and in school planning and management (Epstein and Dauber, 1991). Parental involvement, however, is a process that takes time to develop. Programs that are a part of a more collaborative organizational structure are more likely to produce positive results than those that are instituted in traditional bureaucratic and inflexible school environments (Comer and Haynes, 1991). When attempting to initiate parental involvement programs, consider these key points (Comer and Haynes, 1991; Olmstead, 1991)

- discuss attitudes, hopes, and concerns about parent involvement with school staff to identify and discuss potential obstacles to successful programming and to develop possible ways to overcome these obstacles
- ensure there is broad agreement among staff for such a program
- collect the necessary empirical data to make informed decisions on how to respond to the realities of family life in the community
- establish program goals that meet the needs of school and families. Parents and school personnel should jointly set program goals
- ensure that the structure and climate of the school are adequately developed to accommodate parents
- have clearly defined roles and activities for parents to perform

Parental involvement in the education process, coupled with support and cooperation gained through effective and consistent communication with the school, positively influences students to complete schooling successfully.

School Structuring

Research suggests that for many at risk students the cause of academic difficulties is neither linked to personal and social factors nor low ability, but rather to school and classroom practices (Kronick and Hargis, 1990; Keating and Oakes, 1989; Radwanski, 1987). Concerns that need addressing are

- irrelevant and unstimulating curricula
- inappropriate instructional practices and assessment procedures
- questionable grouping and streaming practices

Curriculum Influences

The curriculum influences the way schools are organized, instruction is delivered, and academic development is assessed. Educators and researchers have pointed out that a number of at risk students are affected by the curriculum for the following reasons.

Curricula which are organized in a lock-step sequence represent a major problem for at risk students. The lock-step sequence fails to consider the diversity of learning abilities in the classroom within each chronological age grouping and the varying time it takes to master content. Since the same amount of time is allotted for each student to progress along the curricular path, if a student's academic progress is too slow, the student will fall further behind. Kronick and Hargis (1990) contend that curricula should be fitted to students, not students to the curricula and suggest multi-age groupings as one solution to this problem.

Lack of relevance and the failure of some curricula to captivate or "engage" students in the learning process is a significant reason given for underachievement, especially at the high school level (Allison and Paquette, 1991; Spain and Sharpe, 1990; Wehlage, Rutter, Smith, Lesko and Fernandez, 1989; Keating and Oakes, 1988; Radwanski, 1987). In other words, students lose interest in school and

eventually withdraw because what is taught lacks personal meaning and relevance.

Consequently, educators need to consider the notions of curriculum relevance and engagement. Engagement involves participation, connection, attachment, and integration in particular settings and tasks (Newmann, 1989). In academic work, engagement is the psychological investment in learning, comprehending and mastering knowledge and skills.

Critical aspects of student engagement include attendance and involvement in class, more specifically, the way students complete their assignments, the amount of time they spend, the intensity of their concentration, the enthusiasm they express and the degree of care they show in their work (Grannis, 1991; Newmann, 1989). Other aspects include: participation in co-curricular or extra-curricular activities, career exploration, and health maintenance (Grannis, 1991). It is highly motivating for teachers to keep their students engaged in learning (Kronick and Hargis, 1990). Several studies have concluded that higher levels of both student and staff engagement were associated with mutual respect, shared control and overlapping activity involving administrators, teachers, support staff, and students (Grannis,1991).

Since learning requires committed effort by each student, engagement is critical, yet difficult to achieve. Five factors are important in enhancing student engagement (Newmann, 1990)

- the need for competence
- extrinsic rewards
- intrinsic interest
- social support
- a sense of ownership

Students may invest or withdraw depending on need for these factors. The fear of failure, especially in competitive situations, can reduce engagement in academic work and direct the need for competence to other activities that are psychologically more comfortable. Cooperative learning among peers provides social support to counteract the alienating aspects of competitive learning.

Wehlage, Rutter, Smith, Lesko and Fernandez (1989) suggest that for many students there are three major barriers to school engagement

- lack of a clear relationship between achievement and an "explicit and valued goal"
- dominance of a narrow learning process
- obsession of teachers with covering subject matter

They claim that the inappropriateness of the learning process in most classrooms derives from the fact that it tends to be abstract, individualistic, competitive, and controlled, instead of concrete, problem-oriented, co-operative, and autonomous.

School engagement is unable to occur in the absence of some minimal level of congruence between student and school values. Moreover, it is unable to take place if academic success is translated into valuing or devaluating individual students (Morris, Pawlovich and McCall, 1991).

An approach frequently applied to the problem of engaging at risk students is to make the learning "practical" by moving it into realistic work environments. However, as the tasks involved in the learning process become more similar to direct experience in the community, the need for school becomes less evident and the reasons for staying in school fewer (Spain and Sharpe, 1990). It is evident that the relevance of what is being taught is confounded by the way it is taught.

Curricula designed for at risk youth must be stimulating and should have personal meaning and use if it is to encourage their re-engagement in the learning process. Teachers need to know how to link what is taught in the classroom to the personal needs, concerns, and interests of students in socially and educationally beneficial ways. The use of problem-solving activities related to life, community service, and study skills, and the use of community settings and personal fields trips are among practices to help build curriculum relevance. When learning is meaningful, socially valued, rewarding, intrinsically interesting, and clearly tied to personal concerns,

schools can develop at risk students to the level of engagement and commitment that underlies educational success.

Instructional Strategies

High school teachers are confronted with students representing a wide range of skills and abilities. Teaching is thought to be more effective when students are instructed at levels commensurate with their abilities (Merchant, 1987). Consequently, instructional strategies need to meet the varying needs of diverse groups of students.

Many educators are arguing for smaller class sizes and more individualized approaches to instruction than is generally found in traditional high schools (Gage, 1990; Merchant, 1987). Personalization and responsiveness to individual needs and differences in the classroom may enhance academic achievement but they also foster social support among students (Newmann, 1989).

Although class size reduction has often been proposed as a way to improve educational performance, current evidence is unable to support the expectation that smaller classes result in academic gains. There are a number of intervening factors such as teacher attitudes, subject areas, teaching methods, and other learning interventions that interact with class size to affect the quality of the classroom and the quality of educational outcomes (Robinson, 1990).

Lecturing, along with monitoring seat work, tends to dominate classroom teaching. However, skillfully individualizing instruction and using a varied repertoire of strategies are essential to meet the range of aptitudes and differences encountered in the classroom and improve outcomes (Keating and Oakes, 1989). Consequently, teachers need to use and be trained to use a more varied repertoire of instructional strategies. They need to be guided by the strengths of at risk students when choosing a strategy. Research indicates that many do not respond well to abstract and sequential teaching styles. They are disproportionately experiential, practical, and hands-on learners (Carbo and Hodges, 1988; Levin, 1988).

Few at risk students have had successful learning experiences (Kronick and Hargis, 1990). Teachers need to build frequent and

immediate rewards into the instructional delivery system. A positive self-concept and anticipation for rewards for work well done appear to be critical to the motivation of at risk youth (Wehlage, Rutter, Smith Lesko and Fernandez, 1989; Levin, 1988).

A variety of instructional strategies have been implemented to meet the needs of at risk students. Among the effective strategies that will be briefly reviewed are cooperative learning, learning-styles based instruction, and computer-assisted instruction.

Cooperative Learning

Cooperative learning methods are structured, systematic, instructional strategies that may be used at any grade level and in most subject areas. What distinguishes cooperative learning methods from traditional instruction is the division of the whole class into small teams of students who are made positively interdependent by the systematic application of principles of reward and task structure (Abrami, Chambers and d'Appolonia et al., 1990; Johnson, Johnson and Holubec, 1990). Cooperative learning methods are intended to supplement individual instruction and supplant individual "seat" work (Slavin, 1989A).

Cooperative learning methods vary considerably along a number of dimensions including philosophy of education, the roles prescribed for teachers, task structures employed and the methods used to evaluate students. However, all methods of cooperative learning share the same fundamental feature of small, heterogeneous groups working toward a common goal. Group members represent a cross-section of the class along characteristics such as student interests, academic ability, gender, ethnicity, and race. Most methods attempt to restrict the possibility of one student completing most of the group's work. Furthermore, recognition and reward are based on the performance of all team members.

The positive effects that cooperative learning has on students depends on two key features: group goals and individual accountability. The group's success must depend on the individual learning of all group members. Studies of methods in which students work together to prepare a single worksheet or project without

differentiated tasks seldom find achievement benefits (Slavin, Karweit and Madden, 1989).

The rationale for implementing cooperative learning methods into the classroom rests upon a theoretical and empirical base which suggests that methods can (Abrami, Chambers and d'Appolonia et. al., 1990; Johnson, Johnson and Holubec, 1990; Sharan and Sharan, 1989; Slavin, Karweit and Madden, 1989; Slavin 1989B; Slavin, 1985)

- usually enhance student achievement, especially the achievement of at risk, minority and low-achieving students
- improve cross-ethnic relations
- assist in the successful mainstreaming of disabled students
- facilitate the maintenance of minority cultural values
- promote positive social relations and prosocial development
- improve self-esteem
- increase the liking of school and learning among students

Cooperative learning among peers may also foster social support to counteract the alienating aspects of individualistic, competitive learning, and the fear of failure, which can suppress engagement in academic work and divert the need for competence to other activities that are psychologically more comfortable (Newmann, 1989).

Learning-Styles-Based-Instruction

Current research indicates that every student has a preferred learning style that affects how they use abilities to receive, store, and use knowledge. An individual's learning style is comprised of a combination of environmental, physical, emotional, psychological, sociological, and cultural elements that provide general directions to learning behaviour. Although certain learning style characteristics or elements, such as an individual's response to light and temperature are biological, others, such as motivation and responsibility are considered developmental. It is, therefore, subject to qualitative changes resulting from maturation and environmental stimuli (Dunn, Beaudry and Klavas, 1989; Carbo and Hodges, 1988; Carbo, Dunn and Dunn, 1986).

No learning style is better or worse than another; each style has similar intellectual ranges (Dunn, Beaudry and Klavas. 1989). Consequently, a student should not be labelled or stigmatized by having a particular type of learning style. Most students master the same content. How they master it, however, is affected by their individual learning styles.

Students who understand and then are provided with opportunities to make use of their learning styles tend to feel valued, respected, and empowered.

Current evidence indicates that students learn best only when they use their learning style characteristics advantageously (Carbo and Hodges, 1988). Students who understand and then are provided with opportunities to make use of their learning styles tend to feel valued, respected, and empowered. A number of studies during the last decade have found that students' motivation and achievement increases when teaching methods match their learning styles (Carbo, Dunn and Dunn, 1986).

Many at risk students do not have the learning styles required to succeed in conventional education systems (Slavin and Madden, 1989). They are disproportionately experiential, practical, and hands-on learners who do not respond well to the abstract and sequential teaching styles of many teachers (Levin, 1988). Accommodating the learning styles of at risk students consistently has resulted in increased academic achievement and improved incidence of discipline problems (Carbo and Hodges 1988; Carbo, Dunn and Dunn, 1986).

Computer-Assisted Instruction

Computer-assisted instruction has demonstrated success in decreasing the early leaving rate and giving at risk students the skills to survive in the workplace (Gross, 1989). In such programs, computers monitor needs, recognize and reinforce success, and keep records of progress. Positive results tend to appear more frequently on basic skills than on higher order skills (Slavin, Karweit and Madden, 1989).

Computer-assisted instruction, cooperative learning, and learning styles-based instruction are some of the instructional strategies that teachers may use to assist at risk students.

Assessment Practices

Measuring learning and academic achievement is a notoriously difficult task, which can be compounded by the use of bad or inappropriate measures. Whether all aspects of learning can be and should be measured remains a contentious issue (Barrow, 1991).

For some time now the educational community has been involved in a debate over the proper way to assess academic performance, with students often caught in the crossfire. Assessment practices have been used for various purposes, such as securing information about student achievement or school effectiveness, to serve a number of consumers of assessment information including teachers, students, parents, administrators, policy analysts, researchers, and government officials.

During the last decade, there has been an increased emphasis on achievement testing to assess the effectiveness of schools and educational reforms. The cumulative effects of achievement testing continues to have negative consequences for many students, including growing disillusionment about tests, decreasing motivation and an unwillingness to give genuine effort (Paris, Lawton, Turner and Roth, 1991). Achievement testing also places teachers at risk of misdirecting their educational efforts and using inappropriate teaching strategies.

Standardized achievement tests have long been accepted as a valid measure of educational accomplishment. In the current atmosphere of discontent and dissatisfaction with public education, the standardized achievement test score has been the operational definition for academic achievement, and higher test scores have been equated with educational improvement (Haladya, Nolent and Haas, 1991; Paris, Lawton, Turner and Roth, 1991). Nevertheless, a considerable body of research has challenged the validity of standardized achievement tests on several grounds (Perone, 1991; Eisner, 1991A; Keating and Oakes, 1988). Many of the concerns raised by the research is well-documented, so to review the whole matter in detail only repeats what is known.

Research, during the past twenty years in cognitive instructional, educational and developmental psychology has shown that learning and academic achievement is more than a collection of discrete

skills. The motivation and purpose of the learner as well as the content and setting of the task have strong effects on learning (Paris, Lawton, Turner and Roth, 1991). Consequently, traditional standardized achievement tests cannot be considered an accurate or complete indication of a student's accumulated knowledge and academic achievement.

Standardized achievement tests may also promote rigidity in the curriculum and in instructional strategies (Keating and Oakes, 1989). They also fail to anticipate and capture the unique features of a particular classroom and in this sense test results may be irrelevant (Eisner, 1990A) and invalid. In contrast, teacher constructed tests for the particular features of the classroom may be valid, but unreliable for other classrooms or for evaluating the overall effectiveness of educational reform. This represents the classic tension between test reliability and validity.

Questions of test validity and reliability, however, is only part of the issue. The usefulness of test results for students and teachers represents another significant concern. Conventional use of assessment practices emphasize grading and labelling and simply rank students, separating, segregating, and sorting them for future participation (Kronick and Hargis, 1990; Keating and Oakes, 1990). Such practices fail to nurture the learning potential of at risk students.

Kronick and Hargis (1990) suggest that educators should avoid using assessment practices simply to supply grades. More importantly, they should be used to tune the difficulty level of instructional activities and materials to students so that they perform successfully. Tests should provide information on where students should begin instruction and should provide direct guidance in planning daily instructional strategies. Consequently, educators need to develop and use assessment tools that provide information about particular aspects of cognitive functioning and lead to specific instructional strategies to overcome weaknesses, instead of practices that simply label students. To this end, Kronick and Hargis (1990) advocate the implementation of curriculum-based assessment.

The essence of curriculum-based assessment is that it is an intrinsic part of continuous instructional activity. Any activity or assignment is assessed and judged for its match with student skill level. The student's performance on activities is judged in view of making an adjustment in difficulty level. Performance is used to see if the instructional level match has been made.

The implementation of curriculum-based assessment changes the role of the teacher. Instruction becomes student-centred rather than teacher-centred. The multilevels of student ability in every classroom precludes the normal teacher-centred delivery system. The teacher's role becomes increasingly that of an observer and monitor of student performance. Consequently the student not the teacher is the central character in the classroom. The teacher must become a facilitator of student performance.

Another type of assessment reform, measurement-driven instruction, seeks to correct validity problems by aligning the curriculum with the test. Proponents of measurement-driven instruction suggest that administrators first determine educational objectives and then select or design tests to measure those skills and outcomes. Teachers can then be encouraged to "teach to the test" because the test embodies instructional goals for the students.

School divisions, however, rarely design their own tests, and the tests selected from commercial options may not cover the unique aspects of a curriculum. Measurement-driven instruction imposes objectives for testing and instruction externally and provides teachers and students with few opportunities to participate in the decisions about what should be learned and how academic progress could be measured.

The creation of diverse portfolio and performance assessments by teachers represents another significant attempt to match instructional level with difficulty. They may be valid for the unique features of a particular classroom. At the same time, however, they may be unreliable for other classrooms.

Paris, Lawton, Turner and Roth (1991) recommend a developmental perspective on testing that helps guide reforms in educational

assessment and prevent students' counterproductive reaction. It can be used to document growth and academic achievement and thus provide measures of public accountability. Their development model of assessment is based upon the following principles.

- Assessment should be collaborative and authentic to promote motivation. Assessment can serve genuine motivational purposes when students share responsibility for setting goals and standards. Students are invited to share in judgments, criteria, outcomes, and recommendations from assessment.

- Assessment should be longitudinal. A variety of evidence can be collected by teachers to document each student's strengths and weaknesses so that the focus of assessment is on personal progress and the time frame is greater than a single year.

- Assessment should be multidimensional, as learning, motivation, and achievement are interactive.

It is evident that assessment practices for different intentions can work at cross purposes and possibly undermine the learning potential and academic success of students. Whether any one particular method of assessment can effectively serve a number of purposes remains an open question. Educators and administrators need to consider the usefulness of their assessment practices for the primary beneficiaries of assessment information, namely students and teachers, and the extent to which those practices allow students to nurture and develop skills and abilities.

A Positive and Supportive Learning Environment

The need for a supportive environment for at risk students is apparent throughout the early, middle, and senior school years. A number of researchers have found that an environment characterized by caring, personalized relationships between staff and students, high yet realistic expectations and clearly defined and attainable goals is beneficial (MacDonald, 1989; Newmann, 1989; Wehlage and Rutter, 1986). Since learning cannot take place in a disruptive and unpredictable environment, students also need an orderly environment that is conducive to learning (Squires, Huitt and Segars, 1983; Edmonds, 1979). Firestone (1989), however,

cautions that these characteristics must be accompanied with opportunities for professional development, the promotion of collegiality, shared decision-making, and personalized administrative support for teachers.

Pupil-teacher interaction is a key factor in the schooling process and constitutes a major concern for any at risk project. A number of early school leavers have stated that unsupportive and disinterested teachers were a contributing factor in their decision to withdraw from school. In addition, many school leavers who participated in a national study sponsored by Employment and Immigration Canada and Statistics Canada were annoyed at what they considered to be a patronizing school environment, where they felt that they were being treated like children. They felt that a critical feature of school or a training program is the tone of the environment in which they are treated as adults on a first name basis.

The most effective teachers with high risk students are those individuals who were able to be creative, encouraging, respectful, empathetic, and supportive.

The most effective teachers with high risk students are those individuals who were able to be creative, encouraging, respectful, empathetic, and supportive. These teachers also made learning relevant (Mills, 1984).

Teachers also need to be sensitive to cultural and social differences among students, especially immigrants and refugees. Consequently, schools need to ensure that learning environments, instructional practices, and curricula reflect the diversity of students they serve.

Personalization and responsiveness to individual differences and needs build social support that help to foster engagements (Newmann, 1989). Some efforts to personalize the school environment include (MacDonald,1989)

- orientation of new students before coming to high school
- staying with the same class for some subjects
- special efforts to involve at risk students in school activities
- developing mentoring and tutoring relationships

The opportunity to learn directly from another person or to have access to a mentor or personal tutor represent additional strategies for assisting at risk students (Morris, Pawlovich and McCall, 1991;

MacDonald, 1989; Radwanski, 1987). Mentors serve as role models to guide students into new experiences, and to provide the necessary adult attention and supports to encourage them to complete school and develop career plans. Mentoring activities can be business or community oriented, use school personnel or focus on work and careers (Morris, Pawlovich and McCall, 1991).

Peer tutoring and cross-age tutoring have been shown to be a particularly powerful intervention for at risk students (Slavin and Madden, 1989). Tutors can assist at risk students in subject areas where the student is experiencing difficulty and re-inforce study skills that will be helpful in other school activities. The use of older students, even students who are themselves at risk, as mentors and tutors for younger students has been found to improve the school performance of both givers and receivers of help.

Mentoring and tutoring have helped to reduce disruptive school behaviour and suspensions, increase school attendance, increase attachment to the school, and improve the likelihood of graduation.

Research indicates that mentoring and tutoring have helped to reduce disruptive school behaviour and suspensions, increase school attendance, increase attachment to the school, improve school achievement and the likelihood of graduation, increase personal worth and self-confidence, and develop greater awareness of the workplace and future career requirements (Morris, Pawlovich and McCall, 1991). The success of peer mediation for conflict resolution in schools supports offering more responsibility for the learning environment to the students themselves (Grannis, 1991).

Radwanski (1987) sees value in the teacher monitoring role that would help alienated youth feel that the high school is a less impersonal environment. Monitoring teachers would be responsible for a specific number of students in relation to checking their academic and personal development and concerns and initiating extra interventions when necessary (MacDonald).

The need for adequate access to counselling services and support services is apparent throughout the early, middle, and senior years, if educators are to properly address the needs of at risk students. Research indicates that guidance and counselling services assist at risk students to cope more effectively with personal problems, become more actively involved in social activities at school, make

more appropriate choices about course offerings and employment opportunities and future careers, and take advantage of out-of-school supports they need from social agencies (Morris, Pawlovich and McCall, 1991).

Peer counselling programs have proven to be beneficial to schools by providing another avenue of communication to youth who find it difficult to relate to teachers or other adults (MacDonald, 1989).

Staff Development

Many administrators, teachers, and pupil services staff lack sufficient training to work effectively with at risk students (Helge, 1989). Working with students, who bring a complex set of needs to the classroom, requires a varied repertoire of instructional strategies, more creative problem-solving, less bureaucracy and more participatory decision-making than is usual in most schools.

Consequently, successful attempts to improve outcomes for at risk students involve developing qualified personnel, especially through staff development. Effective staff development allows teachers, counsellors, and other support service staff to acquire training in practices and techniques that would meet the unique and diverse needs of their students.

Teachers understand the learning needs, styles, and capabilities of their students in ways that many administrators and program specialists are unable to do. It is, therefore, essential that teaching staff be given opportunities to participate in designing and organizing staff development programs that are compatible with the unique needs of their classrooms and schools. As a result, effective staff development programming requires collaboration and cooperation within schools and between schools and the division office.

Current evidence on staff development suggests that once only workshops, pre-implementation training without feedback, professional isolation of teachers, constant top-down policy-making stifles or fails to stimulate professional learning. In addition, formal courses unconnected to the experiences of teachers have little or no impact because they are not designed to provide conditions for the on-going cumulative learning necessary to develop or evolve

new skills, behaviours, and conceptions in practice (Joyce and Showers, 1988; Wideen and Andrews, 1987).

Evidence from effective staff development programming indicates that training activities require four basic components in order to allow for knowledge acquisition and effective classroom practice (Showers and Joyce, 1988; Joyce, Showers and Bennett, 1987).

- **Theory**: A presentation of the theoretical basis or rationale for the teaching strategy.
- **Demonstration**: The teaching strategy must be demonstrated or modelled by someone relatively knowledgeable in its use. This is preferably done several times.
- **Practice**: Participants need to practice the strategy in relatively protected conditions, that is, in simulations with each other or with students relatively easy to teach.
- **Feedback**: The practice is followed by prompt and long-term feedback.

The transfer of knowledge and skills into a teacher's repertoire is further enhanced by an extended period of peer and expert coaching.

Attention is also currently being focused on teacher education as a major strategy for educational improvement in general and at risk students, more specifically, as the preservice education of teachers may not fully prepare them for the complexities of the classroom and the demands of educational change (Fullan, 1991). The Swedish **National Report on At Risk Children and Youth** (1990) suggests that the training of school teachers must give all teachers sufficient competence in special pedagogics for them to work on a preventative and supportive basis. Teachers should be given all-round training with reference to individual, environmental, and school factors that can impede development and learning, and an understanding of the support and assistance that the community can provide.

Work Experience (School to Work Transition Strategies)

Work experience strategies attempt to persuade students to stay in school by strengthening the relationship between schooling and employment, thereby making schooling more relevant to the student and making the preparation more relevant to the labour market. Cooperative education programs, work orientation workshops, career awareness and counselling programs, school-business partnerships and compacts are all examples of this type of strategy.

Compacts are formal agreements under which groups of employers and schools make commitments which benefit both of them. The compact establishes an explicit link between achievement at school and employment, thus providing incentives for otherwise poorly motivated students. Students must meet locally agreed personal goals relating, for example, to attendance, punctuality, and achievement of certain curricular objectives. In return, participating businesses provide practical assistance to the school and undertake to offer jobs with training or training which leads to a job to those pupils who achieve their goals. Research indicates that compacts have demonstrated some success for at risk students (British Report on **At Risk Children and Youth**, 1990; Hargroves, 1986).

Research indicates that school-business community partnerships, when well coordinated, can assist schools in lowering early leaving rates, improve attendance, improve basic skills performance, as well as assist in the acquisition of entry level jobs (Morris, Pawlovich and McCall, 1991). However, schools and business must share the same goals and be committed to their respective roles. Furthermore, a program based only on employment and career training cannot be successful for at risk students.

Controversial issues include whether work experience actually elevates the quality of education for at risk students and the extent to which students are able to choose to participate in such programs. In other words, are specific types of students simply "streamed" into work-experience programs? Streaming has come to be regarded as both educationally dysfunctional and socially unjust (Allison and Paquette, 1991), as students who are poor or members of racial minority groups are more frequently placed in vocational programs and non-college tracks (Keating and Oakes, 1989).

Another significant issue is to what extent do students understand the broader labour market situation, the realities of the workplace, and the degree and quality of education required to sustain a particular lifestyle. Some evidence suggests that a liberal education may be more effective than skill training as a strategy to ensure an efficient workforce and industry. Training people in specific skills equips them only for limited roles and is disadvantageous at a time when it is difficult to accurately predict the needs of the labour market (Barrow, 1991).

Alternative Schools

Schools can draw upon a number of practices and strategies to meet the needs of at risk students. These strategies include caring, concerned teachers, monitoring and mentoring teacher roles, peer counselling and peer tutoring, and a supportive learning environment. Work experience components of the curriculum may also be of benefit to at risk students.

A number of these practices have been incorporated into a general school-within-a-school or alternative school model. Such a model emphasizes a high degree of structure to ensure face-to-face relations between staff and students, provides staff with sufficient autonomy to make decisions on admissions, dismissals, curriculum and scheduling, and fosters teacher collegiality. The model provides a number of innovations in curriculum, especially "experiential" learning.

The model requires the size of the program to be relatively small, ideally 25 to 100 students, in order to personalize and individualize instructional efforts and to monitor students. Students must commit themselves to a set of rules, work expectations, and standards of behaviour. Clear rules about attendance, the quantity and quality of work required, and the consequences of breaking rules are spelled out in detail.

Individualization, clear objectives, prompt feedback and concrete evidence of progress and an active role for students are some of the dominant features of the curriculum. The model allows only a portion of student's time for remediation. Other important activities

explicit in the model include sex education and parenting instruction, health care and nutrition education, and community social service.

Improved social skills and attitudes are important goals within the model. Experiential learning helps students be both active and reflective. Typically, students are involved as volunteers at day care centres, nursing homes, elementary schools or centres for the disabled.

Results from the evaluation of several schools indicate that the greater degree of fidelity to the model, the greater the effects on students' behaviours and attitudes (Wehlage, Rutter and Turnbaugh, 1987). These results indicate that carefully designed school interventions with at risk youth can produce effects that will benefit students and society. Studies have shown that alternative schools are effective in increasing student affective growth, enhanced student self-images, outlook on life, attitudes toward further education than their previously attended conventional schools (Smith, 1989; Taylor, 1987).

Re-Entry/Second Chance Programs

Re-entry strategies allow students who have left school prematurely to return and enroll into specialized instructional and support programs. Such schooling or education may occur in informal educational settings. Alternative schools, literacy programs, specific training programs, job-entry programs are all examples of this type of strategy (Morris, Pawlovich and McCall, 1991). Many early school leavers, who participated in a national study sponsored by the federal government, reported better success with alternative programs than with conventional school programs (Employment and Immigration Canada and Statistics Canada, 1990).

Although some leavers pursue further education after leaving school, few Canadian studies have been undertaken to determine the school returning rate of leavers (MacDonald, 1989). In a study of Newfoundland youth, researchers found that early school leavers' level of information about academic upgrading was quite limited. They had no clear idea of the alternatives to returning to high school (Spain and Sharpe, 1990).

Attempts must be made to publicize methods of re-entry and to maximize the facilitation of re-entry of leavers with flexibility of curriculum choices and hours. Extra counselling support might be provided to facilitate and sustain the re-entry process. Teenage mothers emphasized the importance of access to affordable day care and viewed this as a critical feature of any training or school program. Economic and social assistance school leavers saw the need for a social assistance component to programs. This was felt to be critical to their successful completion of any school or training program. Particular importance was attached to help in finding affordable housing (Employment and Immigration Canada and Statistics Canada, 1990).

Community Involvement

Communities affect the cognitive, social, and emotional development of the children and youth who live in them, and the fate of at risk students depends not only on improvements of schooling and parent involvement, but also on effective community involvement.

Community involvement may entail a variety of processes including mobilizing for change, resource allocation, providing instructional programs in community settings, and promoting information partnerships which allow participating agencies or organizations to share research on issues of common concern. Business sectors can accommodate work-experience students and also be encouraged to participate in mentoring activities within the school. Community agencies such as employment, social, health and mental health services can also be used by the school as additional support systems. Community collaboration and the integration of services has the potential to offer a more comprehensive range of services, a more effective use of personal, and the elimination of program duplication.

Current research on the effectiveness of community involvement on achievement related projects generally indicates few strong effects on academic performance of at risk students (grades and test scores). However, somewhat stronger effects are found on factors such as absenteeism, self-esteem, and attitudes toward school, and that the level of participation is closely related to the strengths of any effects (Nettler, 1990).

Conclusion

Addressing the needs of at risk students represents a challenging task replete with enduring difficulties. A variety of circumstances and conditions can place students at risk, and it is common for many students to have multiple needs that require comprehensive services. Furthermore, a significant number of students who are at risk of failing to complete their education with an adequate level of skills are also at risk of other social problems, including physical and sexual abuse, substance abuse, AIDS, involvement in crime, and early and unwanted pregnancy. Although a number of factors that contribute to students being at risk are seen as existing outside the mandate of education, they cannot be ignored as they affect students' opportunities to learn and to achieve success at school.

Considerable progress has been made in identifying and documenting the necessary strategies and school conditions to deliver the best education to at risk students. A critical body of research accumulated over the last two decades indicates that early intervention, substantial parental involvement in the educational process, innovative curricula, a repertoire of effective instructional techniques that captivate students, a positive and supportive learning environment, and enhanced opportunities for staff development may all contribute to improve outcomes for at risk students.

The well-being of at risk students depends not only on enhanced parental involvement and schooling practices, but also on effective community involvement. Promoting and developing school-community resource networks help to create a broader infrastructure to support the education of at risk students.

The task is to integrate each of these strategies into a coherent whole rather than simply stacking them on top of one another. A thread of effective communication and collaboration runs through such an integrated approach. Many other countries consider that only an integrated preventative education system can solve the problems of at risk children and youth.

Given the contingencies specific to local situations, simply transplanting successful models or strategies from other jurisdictions may not work. Meaningful research-based strategies and practices need to be crafted locally to meet the specific needs of the students

and the community that the school serves. Externally imposed, top-down policy-making and programs usually frustrate the enhancement of educational practice and typically limit staff morale and the sense of ownership and level of commitment. Transferring greater responsibility to staff for decision-making constitutes a promising method of further enhancing outcomes for at risk students.

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